Comment to Docket No. 05-231 In the Matter of Closed Captioning of Video Programming

Dear FCC

We (ENCO Systems Inc.) have studied the NPRM (Docket 05-231) related to closed captioning of video programming with great interest.

The development of new technology to address the issues facing broadcasters in meeting the needs of our hearing impaired community is dependent on how rules evolve for mandated captioning of live broadcasts.

## We believe:

- 1. Limited availability of qualified captioners will continue to constrain captioning of live broadcasts in the broad market.
- 2. Cost to manually caption locally produced live programming is, and will continue to be, prohibitive in many markets.
- 3. The logistics of arranging live captioning for breaking news or event situations will limit availability of captioned broadcasts in these conditions.
- 4. Some local live programming provided outside the top 25 markets will be discontinued due to cost or unavailability of satisfactory captioning methods.
- 5. Technology can address these issues in a cost effective manner, provided its use and extent of acceptance are defined within the rules.

The proposed rules should address a range of use (and threshold of acceptance) for technology based captioning. (Technology based captioning can be defined as use of the latest computer and software technologies to produce textual captions from broadcast audio without human transcription or intervention.)

First and foremost, the goal of technology based captioning is to greatly widen availability of captioned live programming to the hearing impaired community.

The present NPRM makes reference to markets where live captioning is required, those where it is not, and how simple ENT interfaces (which is essentially not live captioning at all) may be applied. No reference is made, or acceptable use defined, for alternative technological approaches. We believe this is necessary to widen the availability of live program captioning and provide broadcasters an acceptable range of use for alternative methods.

## Background

ENCO began looking at the problem of converting broadcast news to digital text several years ago. Our inspiration to do this was driven by some personal history and our recognition that needs of the hearing impaired community were not being addressed adequately, particularly in live and emergency broadcasting.

We employed high performance computing technology and a speech recognition software platform to develop an approach that is speaker independent and has the performance necessary for live broadcasting. Our core competency in dealing with broadcast audio and studio environments enabled us to easily marry this technology to newsroom and common broadcast systems.

The approach has been demonstrated to various organizations representing the hearing impaired community. We took away from these meetings very positive feedback on the value that can be contributed to the deaf and hearing impaired.

Our view of current technology is that it is not a replacement for live captioning, but rather a supplement, well-suited to those areas where live captioning is cost prohibitive or situations that do not permit enough time to arrange for live captioning.

The quality of captioning produced from the technology is comparable to manual live captioning in studio newsroom environments, but is dependent on many factors. However, we believe the technology is very applicable today in those markets not mandated to live caption, and as a back-up or supplement for those that must live caption content.

Broadcasters are hesitant to embrace a new technology where the rules and regulations regarding adoption are in flux. The NPRM makes reference to markets where live captioning is required, those where it is not, and when simple ENT interfaces may be applied.

If technological solutions are to evolve and improve from more research and development, there must be a positioning of its suitability for select applications within the rules.

Quite understandably, a broadcaster large or small will not adopt a technological approach to meet a regulatory requirement unless its acceptability for the application is acknowledged in some fashion within the rules.

The current rule making consideration will likely result in a tightening of quality standards for the top 25 markets (and associated penalties), a process for handling complaints, an exemption process/definition and a defined position on use of ENT feeds as an alternative to live captioning. It can also result in a broadcaster's election to drop programming due to lack of available and affordable captioning (particularly for live coverage).

The rules should include positioning on the use of technology based, live captioning to extend true live captioning beyond the top 25 markets and provide broadcasters lower cost options in defined circumstances and markets.

Yours truly,

Neil S. Price Vice President, COO ENCO Systems Inc.